

AMENDMENT UNDER 37 CFR § 1.111
Serial No. 09/527,584

REMARKS

Reconsideration of this application is requested.

As a result of the foregoing amendments, a total of 28 claims remain in the present application. Claims 12 and 26 have been amended. No new claims have been introduced.

The foregoing amendments are presented in response to the Office Action mailed March 12, 2003, wherefore reconsideration is respectfully requested.

Referring now to the text of the Office Action, original claims 1-28 stand rejected under 35 U.S.C. § 102(e), as it read prior to the American Inventor's Protection Act of 1999, as being anticipated by United States Patent No. 6,363,319 (Hsu). Such rejection is respectfully traversed, based on the discussion below.

United States Patent No. 6,363,319 (Hsu) teaches a method of selecting a route for connection oriented (e.g. MPLS) traffic flows, such that routing decisions can be intelligently based on the respective priority level of each MPLS flow. This enables the method of Hsu to prevent degraded performance of a higher priority MPLS, due to competing bandwidth demands of lower priority MPLS paths mapped through the same link. (See col. 3/ln.23-30) According to Hsu, this is accomplished by calculating "a cost bias factor for each link, which is a function of the link's bandwidth availability and the priority and bandwidth of the given flow. Thus, the cost of a link is the product of its static cost from link state advertisements and this bias factor." (col. 3/ln.16-20). When used in the Dijkstra calculation, this "technique selects a route with sufficient bandwidth that minimizes the cumulative biased cost." (col. 3/ln.20-22).

Based on the foregoing, it will be seen that Hsu calculates a "cost bias factor" which biases the "static cost from link state advertisements" normally used by the Dijkstra calculation. As such, Hsu teaches a modified route selection technique for controlling the mapping of MPLS paths across a network. Hsu provides no teaching with respect to adjustment of a connectionless traffic metric (e.g. an IGP metric) in response to determination of a resource requirement of the connection-oriented traffic. According to Hsu, the standard link metrics (in the terminology of Hsu, the "static cost from link state advertisements") remain unchanged. As a result, the standard link metrics are used, in a conventional manner, for the routing of connectionless (e.g. IP) traffic. This means that IP traffic will be forwarded to a link independently of the bandwidth

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requirements of MPLS flows previously mapped through that same link. Consequently, the method of Hsu will do nothing to prevent a situation in which the performance of an MPLS flow is degraded due to the bandwidth demands of competing IP traffic.

In direct contrast, the present invention is directed to a method of managing the logical allocation of resources between connection-oriented traffic, and connectionless traffic routed through a shared physical network element of a communications network. As defined in claim 1, the method of the present invention provides that a resource requirement of the connection oriented traffic is determined and used to dynamically adjust a connectionless traffic metric. As a result, connectionless (e.g. IP) traffic will be routed based on the dynamically-adjusted metric. Hsu does not teach or suggest this functionality, nor any advantages obtain thereby.

Hsu does not teach or suggest a method for managing the logical allocation of physical network resources between connection-oriented and connectionless traffic. Instead, Hsu manages allocation of network resources between competing MPLS flows, and is utterly silent with respect to competing connectionless traffic. Consequently, it is respectfully submitted that the claimed invention is clearly distinguishable over the teaching of United States Patent No. 6,363,319 (Hsu).

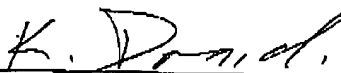
None of the known prior art teaches or suggests the missing subject matter. Accordingly, it is submitted that the present invention as defined in original claims 1 and 15 is clearly distinguishable over the prior art of record, and is patentable. The dependent claims 2-14 and 16-28 are believed to define further patentable subject matter.

In light of the foregoing, it is submitted that the presently claimed invention is clearly and unambiguously distinguishable over the teachings of the cited references. Accordingly, it is believed that the present application is in condition for allowance, and early action in that respect is now courteously solicited.

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If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,


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